



MIYN46 Wall Transmitter

970.035b | F.01U.278.521 | V2.0 | 2012.12



BOSCH

en User Manual US

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1 Generalities

1.1 Resident Alert System

Alarms and Messages arriving from Resident Alert System Transmitters such as the MIYN46 Wall Transmitter are managed and stored by the Main Unit.

1.2 MIYN46 Wall Transmitter

The MIYN46 Wall Transmitter is a multifunction terminal radio transmitter, designed for residents and staff to make an emergency call, summon assistance or cancel a call directly in the resident's room. It is part of a Resident Alert System, and is easily expandable.

In the Resident Alert System, the MIYN46 Wall Transmitter allows the resident of an independent living or assisted living facility to easily alert the care personnel if needed. The resident simply has to push the large red button. The system is then able to control and to monitor the progress of the care personnel.

The alarm and event transmission is performed by radio. There is no need for a wired connection between the MIYN46 Wall Transmitter and the Main Unit, this makes the system installation easy and allows great mobility.

Depending on the model, two relay outputs are available and may be used to connect alarm and staff presence indicators such as, for instance, the signal lamps installed above the door.

Two LED signal lamps allow the progress to be monitored on the device.

In this document you will find all the information you need for the installation and the use of the MIYN46 Wall Transmitter.

2 Safety Instructions

**WARNING!**

The User / Installer should read and understand this chapter before any intervention on the MIYN46 Wall Transmitter.

2.1 Introduction

2.1.1 Principle

**NOTICE!**

In case of unclear information, please contact your local representative.

2.1.2 Importance of safety instructions

Each safety and protection instruction in this manual must be adhered to in order to avoid personnel injuries, property damages or environmental pollution.

In a similar manner, the legal bylaws, the measures in prevention of accidents and for the protection of the environment, as well as the recognized technical rules aiming at appropriate and safe working conditions which as applied in the country and at the place of use of the MIYN46 Wall Transmitter must be adhered to.

2.1.3 Disregarding safety rules

Disregarding the safety rules, as well as existing legal and technical regulations, may lead to accidents, to property damages or to environmental pollution.

2.2 Environmental conditions

**WARNING!**

The MIYN46 Wall Transmitter must not be located near a water tap or any other source of water.

The electrical safety of the MIYN46 Wall Transmitter is only guaranteed if the electrical installation is in accordance with the national regulations and if this installation works properly. The MIYN46 Wall Transmitter may not be used in buildings prone to fire and explosion hazards.

**CAUTION!**

The MIYN46 Wall Transmitter may not be used under exposure to the direct sunlight, to heat, to dust or to an excessive humidity (only use the equipment in a clean environment).

- ▶ Install the MIYN46 Wall Transmitter in a dry place, away from any source of heat.

**CAUTION!**

Interferences

Avoid immediate proximity to other electric devices such as a television.

2.3 General safety instructions



DANGER!

During maintenance operations, when the MIYN46 Wall Transmitter is powered and its casing is removed, the MIYN46 Wall Transmitter may not be left unattended.



CAUTION!

The MIYN46 Wall Transmitter may only be connected to the electrical sources as described in *Section 4.2 Installation*, page 11.



CAUTION!

Maintenance and repairs may only be performed in accordance with the instructions and by authorized technical personnel only. The sole possession of the User Manual US does not allow the personnel to perform any kind of repair on the MIYN46 Wall Transmitter. Take into account all the warnings and follow all the instructions displayed on the MIYN46 Wall Transmitter and those which are printed in the documentation. Never try to use replacement pieces other than those authorized by the manufacturer of the MIYN46 Wall Transmitter.



CAUTION!

It is mandatory to use the products specified in the present User Manual US to clean the MIYN46 Wall Transmitter. If you plan to use another product, only do so after having obtained the authorization of the manufacturer.



WARNING! Electro Static Discharge

The MIYN46 Wall Transmitter contains highly sensitive electronic components. It should be opened only in an **ESD** protected environment with respect to the following precautions:

- ▶ Discharge yourself from electrostatic loads by touching a grounded conductive surface before opening the unit.
- ▶ Avoid touching conductive parts inside the MIYN46 Wall Transmitter if not absolutely necessary.



CAUTION!

Never let any liquid enter the system. In case of liquid spill inside the MIYN46 Wall Transmitter, act immediately as follows:

1. Switch off the MIYN46 Wall Transmitter: take out the battery or remove the power supply.
2. Dry up the MIYN46 Wall Transmitter.
3. Clean the MIYN46 Wall Transmitter.
4. Check its electrical functions.

2.3.1 Observation and information

In case of defective operation or any other technical incident for which no remedy is described in this manual, please contact immediately your local representative.

2.4 Special safety instructions

Appropriate safety instructions linked to specific risks are described in the corresponding section of this manual.

3 Description

3.1 General description

3.1.1 Top view

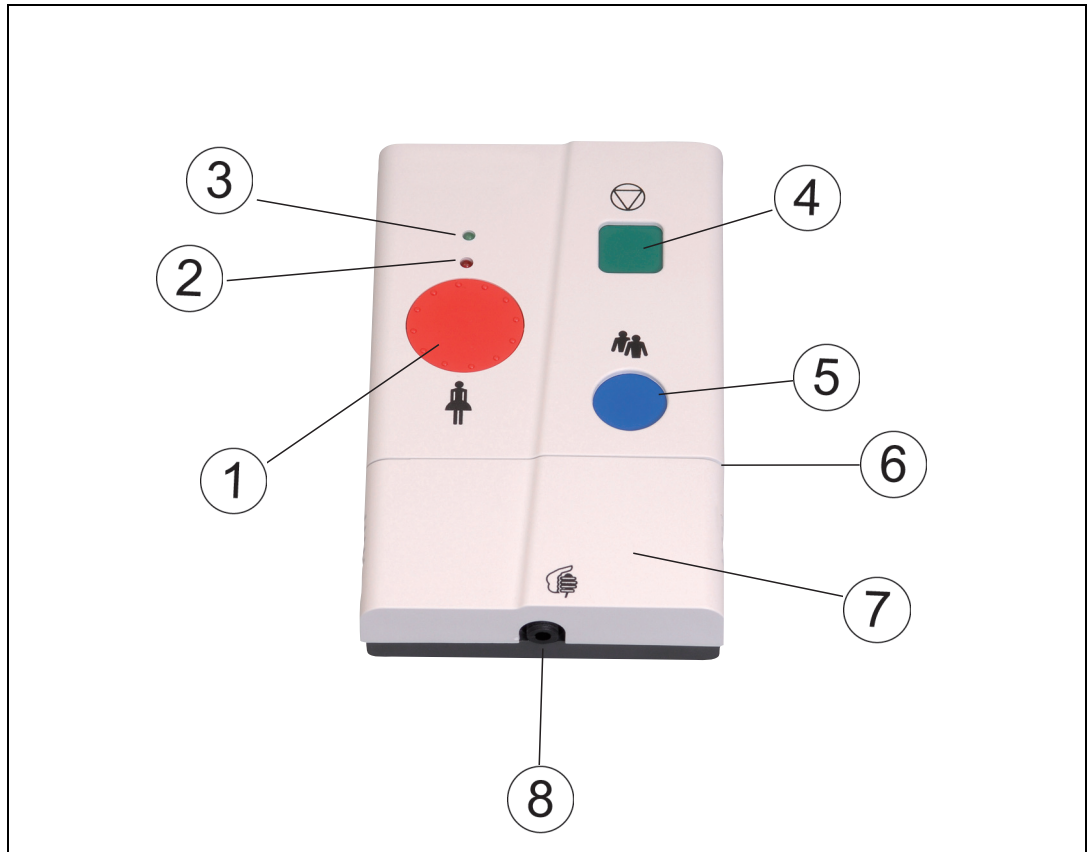


Fig. 3.1 Top view

1. **Red** emergency call button
2. LED indicator for alarm
3. LED indicator for presence
4. **Green** acknowledgment button, to acknowledge an alarm locally.
5. **Blue** assistance call button
6. Socket for coded key insertion (option)
7. Installation compartment
8. Jack plug for pear-push button

3.2 Main functions

The main function of the MIYN46 Wall Transmitter is to enable easier handling of emergencies and help, directly from the resident's room.

3.2.1 Red emergency call button

Its large red button with textured surface makes it easy to identify and to press, launching an emergency call.

3.2.2 Blue assistance call button

If, upon arriving, the staff requires additional help, a call for assistance can be sent by pressing the round blue button.

3.2.3 Green acknowledgment button

In all cases, there is an automatic call repetition until cancel of the call. Cancelling can be made directly on the room transmitter with the smaller green button.

3.2.4 Alarm signaling

The presence and alarm LED indicators enhance the signaling of alarms.

The MIYN46 Wall Transmitter is easily expandable, as a socket for pear-push button is directly accessible.

4 Installation

4.1 Unpacking

The MIYN46 Wall Transmitter is carefully packed for transportation. The components contained in the box are protected, but should be handled with care. Store the packaging material for further use (storage or transport).



NOTICE!

In case of defective or missing equipment, do not try to install the MIYN46 Wall Transmitter. Contact immediately your local representative.

1. Take the components out of the box and place the MIYN46 Wall Transmitter in front of you.
2. Check each component in the box, in accordance with the list of contents below.
3. Check that the MIYN46 Wall Transmitter and its accessories have not been damaged during transportation.

4.1.1 List of contents

Description
MIYN46 Wall Transmitter
2 screws
2 screw anchors
1 CR2450 3V Lithium battery
User Manual US

4.2 Installation

4.2.1 Generalities

- ▶ Install the MIYN46 Wall Transmitter in a dry place, away from any source of heat.



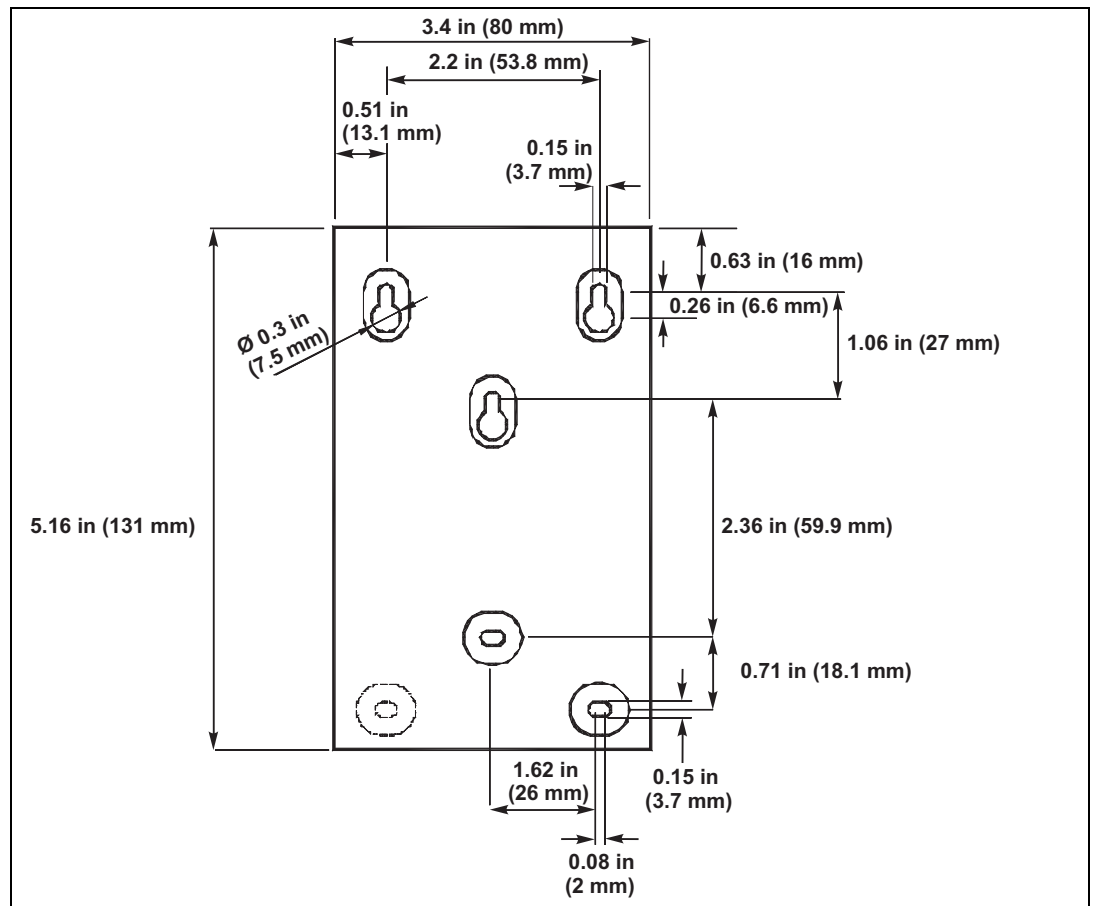
CAUTION!

Interferences.

Avoid immediate proximity to other electric devices such as a television.

4.2.2 Wall installation

The MIYN46 Wall Transmitter can be fixed with two to five screws on a wall. Two holes at 2.4 inches (60 mm) interval are provided for direct mounting on connection boxes. The three upper holes are used for positioning the device and cannot be reached from the installation compartment.



4.2.3 Connecting to the power supply

The MIYN46 Wall Transmitter can be powered by a lithium battery or/and an external 12-24 VDC power supply. If the device is powered with an external power supply, the battery is not necessary, but it can be used as a backup power supply in case of power loss.

If the device is powered by the battery only, the battery life is about 2 years. However, it is recommended to change the battery once a year.

If the device is powered by an external power supply and the battery is used as backup power supply, it is recommended to check it at regular intervals (for instance once a year) and to change it if necessary.



CAUTION!

When powering the device, the external 12-24 VDC power supply must be equipped with a setting off safety device, that is easy to access. The power supply must also be equipped with a safety fuse of lower value, e.g. 100 or 125 mA.

4.2.4

Reset

All parameters are reset when powering up the device (battery or external power supply). This operation causes the synchronization of the daily message.

In order to perform a reset, make sure to remove both the battery and the external power supply, make a short-circuit on the two pins marked **Reset** before powering the device up again. See *Section Fig. 4.2 Configuration and Wiring*, page 14.



NOTICE!

All connections as well as the configuration need to be carried out before powering the device (insertion of the battery and/or application of the external power supply).

4.2.5

Transmitter Identification

All MIYN46 Wall Transmitters are provided with their own radio identification code that is assigned in the factory. During the installation, it is necessary to set the relationship between the identification code of the Transmitter and the place where it is installed (floor/room/bed or single number). This identification is programmed on the Main Unit (refer to the Main Unit User Manual).

4.2.6

Operation Check

Once the transmitter has been installed and setup properly, it is recommended to check all functionalities of the device. The radio transmission can be checked by sending an acknowledgement call by pressing the green button.

4.2.7 Replacing the battery



WARNING!

- May explode if exposed to fire;
- Use only original batteries intended for use with your MIYN46 Wall Transmitter. Using other type of batteries could be dangerous;
- Do not expose the battery to liquids;
- Do not let the metal contacts on the battery touch another metal. This could damage the battery;
- Do not disassemble or modify the battery;
- Do not expose the battery to extreme temperatures, and never above 60 °C (+140 °F).
- For maximum battery capacity, use the battery at room temperature;
- Keep out of reach of children;
- Use the battery for the intended purpose only;
- Do not allow the battery to be put into the mouth. Battery electrolytes may be toxic if swallowed.



CAUTION!

There is a risk of explosion if battery is replaced by a wrong type or if not connected correctly. The battery should be replaced exclusively by Authorized Personnel. Dispose of used batteries according to instructions and regulations.

Battery type is 3V CR2450/DL2450.

Procedure

1. Open the compartment cover (1) by sliding it downwards and then towards you.
2. Carefully remove the used battery (2).
3. Place the new battery. The positive terminal must be facing you.
4. Replace the compartment cover.

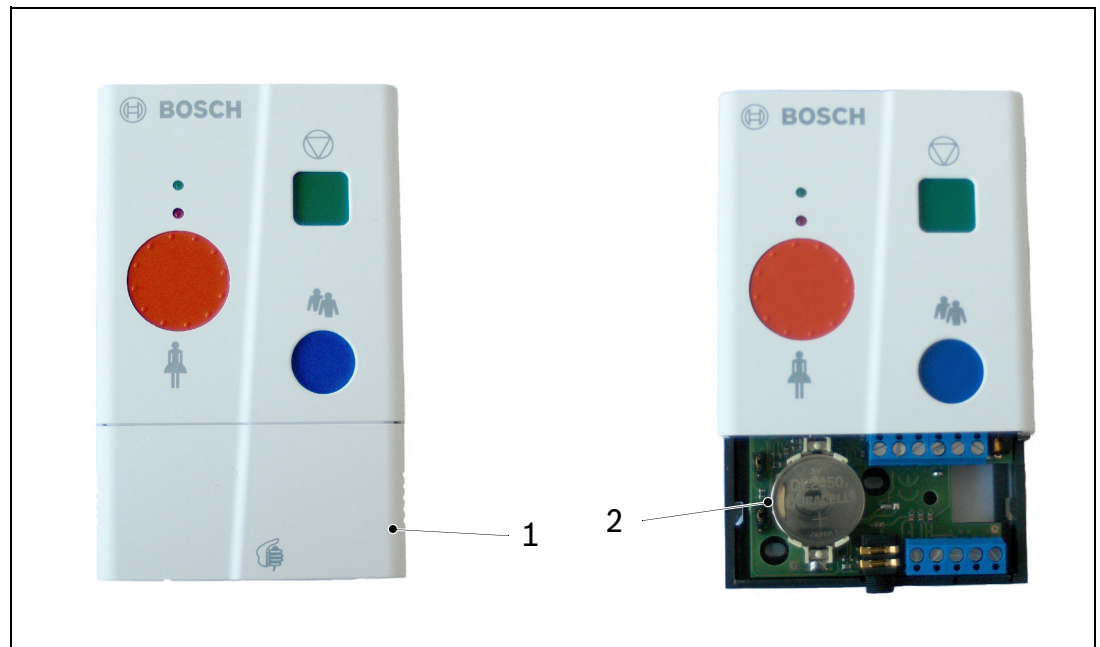


Fig. 4.1 Replacing the battery

4.2.8 Configuration and Wiring

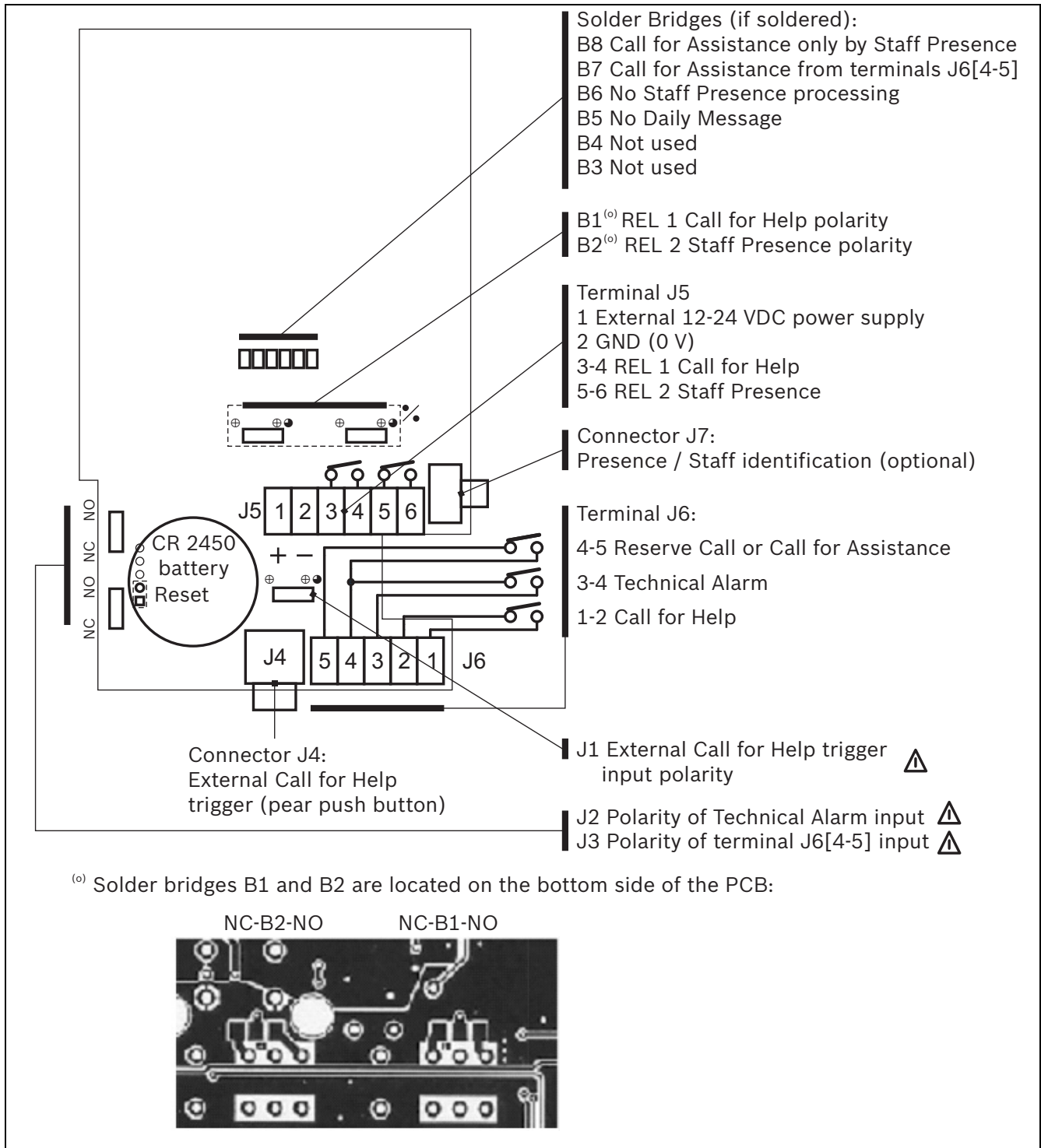


Fig. 4.2 Configuration and Wiring



NOTICE!

Setting up one or more inputs to "NC" position results to higher power consumption. This configuration should be used with external power supply or will reduce the battery life.

4.3 Inputs and Outputs

4.4 General inputs

The * marks a factory setting.

External trigger	J4	Jack	J1	NO*	Closing contact causes a Call for Help
				NC	Contact opening causes a Call for Help

Power supply	J5	1		+	12 to 24 V DC
		2		-	GND 0V

4.5 Wired Outputs

Call for Help Relay	J5	3-4	B1	NO*	A Call for Help causes the closing of the relay contact
				NC	A Call for Help causes the opening of the relay contact

Staff Presence Relay	J5	5-6	B2	NO*	Staff Presence signaling causes the closing of the relay
				NC	Staff Presence signaling causes the opening of the relay

4.6 Wired Inputs

Call for Help	J6	1-2			The contact closing causes a Call for Help.
---------------	----	-----	--	--	---

Technical Alarm	J6	3-4	J2	NO*	The contact closing causes a Technical Alarm
				NC	The contact opening causes a Technical Alarm

Reserve Call or Call for Assistance	J6	4-5	J3	NO*	The contact closing causes a Reserve Call or a Call for Assistance
				NC	The contact opening causes a Reserve Call or a Call for Assistance

4.7 General configuration

The * marks a factory setting.

Bridge	State	Function
B3	Open*	Technical Alarms are not repeated.
B4	Soldered*	Calls are not repeated.
B5	Open*	A daily message is sent every 24 hours.
	Soldered	Daily messages are suppressed.
B6	Open ^(o)	Staff Presence Processing is activated.
	Soldered ^(o)	Staff Presence Processing is disabled.
B7	Open*	Activation of J6 [4-5] terminal input causes a Reserve Call.
	Soldered	Activation of J6 [4-5] terminal input causes a Call for Assistance.
B8	Open*	The Assistance Call does not depend on the presence of the Care Personnel.
	Soldered	The Assistance Call is possible only if the Care Personnel has signaled his/her presence.

^(o) MIYN46 Wall Transmitters that feature the output relays are delivered with the Staff Presence Processing activated (B6 open). Models that do not feature the output relays are delivered with the Staff Presence Processing disabled (B6 soldered).

5

Use

Every time a MIYN46 Wall Transmitter is used by pressing a button or activating a wired input, the device sends a radio signal and the lamps indicates its actual state. Optionally, two relays allow the transmission of status to a remote display such as the signal lamps placed on top of the door.

Each radio message is sent with a different code which allows the receiver (Resident Alert System) to recognize the performed action.



NOTICE!

It is recommended to keep the button pressed until the lamp placed above the red button lights up.

5.1

Call for Help

The Call for Help can be triggered in three different ways:

- by pushing the red Call for Help button
- by pushing the external switch connected to the J4 connector, for example a pear push button.
- by pushing the external button connected to terminals 1 & 2 of the terminal block J6.

The Call for Help is repeated approximately every 2 minutes until a call acknowledgement takes place, up to a maximum of 20 minutes. This repeat function can be disabled by setting the solder bridge B4.

A Call for Help is signaled by red flashes on the signal lamp and optionally, by the activation of the relay Call for Help.



NOTICE!

In some cases, the action Call for Help generates a Call for Assistance action. See *Section State before action: Alarm with staff presence*, page 22.

5.2

Call for Assistance

The Call for Assistance is triggered by pushing the Call for Assistance button (blue).

The Call for Assistance is repeated approximately every 2 minutes until a call acknowledgement takes place, up to a maximum of 20 minutes. This repeat function can be disabled by setting the solder bridge B4.

A Call for Assistance is signaled by red double flashes on the signal lamp and by the alternate action/release of the relay Call for Help.

5.3 Call Acknowledgement (Staff Presence)

The call acknowledgement is triggered by pushing the Acknowledgement button (green).

The call acknowledgement stops immediately all repetitions of the calls.

Optionally, a call acknowledgement triggers the Staff Presence signal:

- by green flashes on the signal lamp and by activating the Staff Presence relay when the Caregiver pushes the Acknowledgement button when entering the room.
- by switching off the lamp and releasing the Staff Presence relay when the Caregiver pushes the Acknowledgement button and leaves the room.

5.4 Reserve Call

The Reserve Call is triggered by pushing the external button connected to terminals 4 and 5 of the terminal block J6.

The call can be triggered by closing (NO) or opening (NC) the contact.

The Reserve Call is repeated about every 2 minutes until a call acknowledgement takes place, up to a maximum of 20 minutes. This repeat function can be disabled by setting the solder bridge B4.

The Reserve Call is signaled in the same way as the Call for Help on the signal lamp and the relays.

5.5 Technical Alarm

The Technical Alarm is triggered by activating the contact connected to terminals 3 and 4 of the terminal block J6.

The alarm can be triggered by closing (NO) or opening (NC) the contact 3.

Normally, the Technical Alarm is not repeated, but it is possible to activate the repetition of the technical alarms by setting the solder bridge B3. In this case, the Technical Alarm is repeated about every 2 minutes until a call acknowledgement takes place, up to a maximum of 20 minutes.

The Technical Alarm is signaled in the same way as the Call for Help on the signal lamp and the relays.

5.6 Caregiver Arrival

The Caregiver Arrival message is triggered when the Caregiver inserts the coded key in the connector on the side of the housing (J7), when entering the room. This message will appear if the optional coded key function is available on the device.

Up to four categories of Caregivers may be identified by using different keys.

The Caregiver Arrival message is not repeated.

Insertion of the coded key is signaled by green flashes on the signal lamp and by activating the Staff Presence relay.

5.7 Caregiver Departure

The Caregiver Departure message is triggered when the Caregiver removes the coded key from the housing, when leaving the room.

The Caregiver Departure message is not repeated.

Removing the coded key is signaled by switching off the green flashes on the signal lamp and by releasing the Staff Presence relay.

5.8 Daily Message and Battery Low Message

The radio transmission can be checked by way of the daily message which is automatically sent about every 24 hours. When the battery voltage is too low, the daily message is replaced by a Battery Low message. The duration of the daily message is 1.7 seconds.

The transmission of the Daily Message can be disabled by setting the solder bridge B5 (this does not influence the transmission of the Battery Low message).

5.9 Error Message

The Error Message is sent one time if the device has detected a general dysfunction, or if one of the following triggering devices remains in its activated position for up to 4 minutes:

- Call for Help
- Acknowledgement button
- Call for Assistance
- Reserve Call



NOTICE!

The device connected to the Technical Alarm input is allowed to remain in the activated position; without transmission of the Error Message.

6 Operation

6.1 Description of the six different states

During operation, the MIYN46 Wall Transmitter can be set to one of six following states:

State	Description
Stand-by	No call is being processed.
Alarm without staff presence	The resident has triggered a Call for Help but the Care Personnel has not yet responded.
Alarm with staff presence	The Care Personnel has responded after a Call for Help.
Assistance without staff presence	A Call for Assistance has been triggered without the presence of the Care Personnel.
Assistance with staff presence	A Call for Assistance has been triggered in the presence of the Care Personnel.
Staff Presence without alarm	The Care Personnel has responded without a previous call from the resident.

Each state is indicated by the signal lamp and by a special position of the output relays.

It is possible to configure the MIYN46 Wall Transmitter in order that:

- the Call for Assistance can be triggered only if the Care Personnel is present.
- the device does not manage the Staff Presence. This mode makes sense only if the output relays are not provided or not used.

The transition to a specific condition depends on the device configuration, of its actual condition and of the action completed; as shown on the charts in the following chapters.



NOTICE!

When the MIYN46 Wall Transmitter is powered by an external power supply, the signal lamps follow the state of the corresponding relay outputs.

6.2 Legend of illustrations

















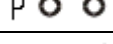




Legend	Description
A 	The contact of the Call for Help relay is closed
A 	The contact of the Call for Help relay is open
A 	The contact of the Call for Help relay opens and closes alternately
p 	The contact of the Staff Presence relay is closed
p 	The contact of the Staff Presence relay is open
	The signal lamps are off
	A signal lamp lights up in the indicated color
	A signal lamp flashes in the indicated color
	A signal lamp flashes quickly in the indicated color

Table 6.1

6.3 Operation with the staff presence processing activated













6.3.1 Device behavior when pressing a button

State before action: Stand-by

Action	State	Relay contact	Signal lamp	Radio Message
	Stand-by	A  p 		(none)
Call for Help	Alarm without staff presence	A  p 	 red	<i>Call for Help</i>
Call Acknowledgement	Staff presence without alarm	A  p 	 green	<i>Acknowledgement</i>
Call for Assistance	Assistance without staff presence **	A  p 	 red	<i>Call for Assistance</i>













** If the function Assistance only in case of Staff Presence is activated and the MIYN46 Wall Transmitter is not in Staff presence state, the Call for Assistance causes a state Alarm without Staff Presence and a Call for Help radio message.

State before action: Alarm without staff presence













Action	State	Relay contact	Signal lamp	Radio Message
	Alarm without staff presence	A  P 	 red	(none)
Call for Help	Alarm without staff presence (unchanged)	A  P 	 red	<i>Call for Help</i>
Call Acknowledgement	Alarm with staff presence	A  P 	 green	<i>Acknowledgement</i>
Call for Assistance	Assistance without staff presence **	A  P 	 red	<i>Call for Assistance</i>

**If the function Assistance only in case of Staff Presence is activated and the MIYN46 Wall Transmitter is not in Staff presence state, the Call for Assistance causes a state Alarm without Staff Presence and a Call for Help radio message.













State before action: Alarm with staff presence

Action	State	Relay contact	Signal lamp	Radio Message
	Alarm with staff presence	A  P 	 green	(none)
Call for Help	Assistance with staff presence	A  P 	 green	<i>Call for Assistance</i>
Call Acknowledgement	Stand-by	A  P 		<i>Acknowledgement</i>
Call for Assistance	Assistance with staff presence	A  P 	 green	<i>Call for Assistance</i>













State before action: Assistance with staff presence

Action	State	Relay contact	Signal lamp	Radio Message
	Assistance with staff presence	A  P 	 green	(none)
Call for Help	Assistance with staff presence (unchanged)	A  P 	 green	<i>Call for Assistance</i>
Call Acknowledgement	Alarm with staff presence	A  P 	 green	<i>Acknowledgement</i>
Call for Assistance	Assistance with staff presence	A  P 	 green	<i>Call for Assistance</i>

State before action: Assistance without staff presence

Action	State	Relay contact	Signal lamp	Radio Message
	Assistance without staff presence	A  P 	 red	(none)
Call for Help	Assistance without staff presence (unchanged)	A  P 	 red	<i>Call for Assistance</i>
Call Acknowledgement	Alarm with staff presence	A  P 	 green	<i>Acknowledgement</i>
Call for Assistance	Assistance without staff presence	A  P 	 red	<i>Call for Assistance</i>













State before action: Staff presence without alarm

Action	State	Relay contact	Signal lamp	Radio Message
	Staff presence without alarm	A  P 	 green	(none)
Call for Help	Alarm with staff presence	A  P 	 green	<i>Call for Help</i>
Call Acknowledgement	Stand-by	A  P 		<i>Acknowledgement</i>
Call for Assistance	Assistance with staff presence	A  P 	 green	<i>Call for Assistance</i>













6.4 Operation with the staff presence processing deactivated

6.4.1 Device behavior upon pressing a button













State before action: Stand-by

Action	State	Relay contact	Signal lamp	Radio Message
	Stand-by	A  P 		(none)
Call for Help	Alarm without staff presence	A  P 	 red	<i>Call for Help</i>
Call Acknowledgement	Stand-by	A  P 		<i>Acknowledgement</i>
Call for Assistance	Assistance without staff presence *	A  P 	 red	<i>Call for Assistance</i>

State before action: Alarm without staff presence

Action	State	Relay contact	Signal lamp	Radio Message
	Alarm without staff presence	A  P 	 red	(none)
Call for Help	Alarm without staff presence (unchanged)	A  P 	 red	<i>Call for Help</i>
Call Acknowledgement	Stand-by	A  P 		<i>Acknowledgement</i>
Call for Assistance	Assistance without staff presence *	A  P 	 red	<i>Call for Assistance</i>

State before action: Assistance without staff presence

Action	State	Relay contact	Signal lamp	Radio Message
	Assistance without staff presence	A  P 	 red	(none)
Call for Help	Assistance without staff presence (unchanged)	A  P 	 red	<i>Call for Assistance</i>
Call Acknowledgement	Stand-by	A  P 		<i>Acknowledgement</i>
Call for Assistance	Assistance without staff presence	A  P 	 red	<i>Call for Assistance</i>

7 Storage

One can distinguish between long term storage and short term storage.

If the MIYN46 Wall Transmitter must be temporarily stored, it may not be necessary to wrap it completely.

However, if you wish to store the MIYN46 Wall Transmitter for a longer time, for instance in a storage room or any similar location, it is recommended to use original packing material.

7.1 Short term storage conditions

Unwrapped MIYN46 Wall Transmitter in a room:

- ▶ Protection against direct sunlight and dust.

7.2 Long term storage conditions



NOTICE!

The MIYN46 Wall Transmitter does not lose its programmed parameters when the power supply and the backup battery are disconnected.

MIYN46 Wall Transmitter in its original packing material in a storage room:

- ▶ Backup battery removed;
- ▶ Protection against direct sunlight and dust.

8 Disposal

This chapter describes the appropriate disposal of the MIYN46 Wall Transmitter.

The MIYN46 Wall Transmitter is marked with a crossed-out wastebasket symbol.

This means that, at the end of its useful lifespan, the product shall be disposed separately from ordinary household wastes in accordance to the local directives.

The product and its accessories shall be delivered to an appropriate collection facility that will permit recycling, treatment and environmentally compatible disposal. This will prevent negative impact on the environment and human health and promotes the recycling of materials. For more information on available collection facilities, contact your local waste collection service or your local representative.

8.1 Disassembly

Only authorized personnel are allowed to disassemble a MIYN46 Wall Transmitter.

8.2 Local disposal locations

The nearest disposal locations are established in accordance with the currently applicable laws. Ask the local authorities.

8.3 Returning to the manufacturer

If there is no practical disposal place, the MIYN46 Wall Transmitter may be returned to your local representative.

8.4 Materials

The MIYN46 Wall Transmitter must be returned to an authorized point of recycling.

In order to protect people and environment, the MIYN46 Wall Transmitter must be recycled in an adequate manner. Consequently, all applicable laws and bylaws must be respected.

8.4.1 Battery



NOTICE!

The battery should never be placed in municipal waste. Use a battery disposal facility if available.

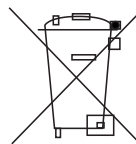


Fig. 8.1 Crossed-out wastebasket symbol

- ▶ Please check local regulations for disposal of batteries or call your local representative for information.

9 Appendix

9.1 Electrical specifications

External power supply & consumption	12-24 VDC Transmission: < 40 mA Idle mode: < 10 mA
Battery power supply & consumption	3V lithium battery CR2450 Transmission: < 30 mA Idle mode: < 10 µA
Battery life	Approx. 2 years

Table 9.1 Electrical specifications

9.2 Dimensions and weight

Casing dimensions	[in]	[mm]
Depth	1	26
Width	3.2	82
Height	5.2	132
Casing weight	[oz]	[g]
Weight (including antenna and power supply adaptor)	7	200

Table 9.2 Dimensions and weight

9.3 Operating temperature

Operating temperature	32 °F - 131 °F (0 °C - 55 °C)
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Table 9.3 Environmental conditions

9.4 FCC warning statement

This equipment complies with Part 15 of the FCC rules. Any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC rules subject to the following two conditions:

1. This device may not cause harmful interference
2. This device must accept all interference received, including interference that may cause undesired operation.

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